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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,232	04/24/2006	Masahiro Shioi	1152-0321PUS1	4876

2292 7590 11/14/2007
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EXAMINER	
RICE, ELISA M	

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
11/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/541,232	SHIOI ET AL.	
	Examiner	Art Unit	
	Elisa M. Rice	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/01/2005,04/24/2006,01/31/2007.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Oshima (EP 1693844 A2).

Regarding claim 1, Oshima discloses an image data generating apparatus for generating image data of a predetermined data format from a plurality of images corresponding to a plurality of viewpoints, comprising: an information generating means for generating an integration information that indicates whether images from different viewpoints have been integrated or not (Oshima, Fig. 17) and an image placement information that indicates a placement mode of the images from different viewpoints

when the images are integrated, wherein the data format includes the integration information and the image placement information (Oshima, Fig. 4).

Regarding claim 7, Oshima discloses an image data reproducing apparatus for reproducing a plurality of images corresponding to a plurality of viewpoints, from image data of a predetermined data format, comprising: an analyzing means for analyzing the predetermined data format, wherein the analyzing means analyzes an integration information that indicates whether images from different viewpoints have been integrated or not (Oshima, Fig. 17) and an image placement information that indicates a placement mode of the images having been integrated (Oshima, Fig. 4), and reproduces the plurality of images using the integration information and the image placement information (Oshima, Fig. 15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al. (EP 1693844 A2) and Matsuo et al. (EP 0971261 A2).

Regarding claims 2 and 3, while Oshima discloses the image data generating apparatus according to claim 1, Oshima does not specifically disclose wherein the image placement information is information on the placement mode in which the viewpoint images are positioned by rotation of a predetermined angle. wherein the predetermined angle is one or plural among 0 degrees, 90 degrees clockwise, 180 degrees clockwise and 270 degrees clockwise.

Matsuo teaches wherein the wherein the image placement information is information on the placement mode in which the viewpoint images are positioned by rotation of a predetermined angle, wherein the predetermined angle is one or plural among 0 degrees, 90 degrees clockwise, 180 degrees clockwise and 270 degrees clockwise (Matsuo, paragraph 55, Fig. 9).

It would have been obvious at the time of the invention to modify the image display control apparatus of Kawai with the plurality of predefined angles taught by Matsuo in order to define "a rotating direction angle setting table" as described in paragraph 53 where the values 0 through 3 represent rotational information as described in paragraph 55. Paragraph 55 of the Matsuo reference goes on to say that as a result of having a rotating direction angle setting table 707, "the image rotating devices 703 and 704 rotate the image data using a predetermined transformation matrix equation, based on parameters provided by the obtained rotation information."

Regarding claim 4, while Oshima discloses most of the image data generating apparatus according to claim 1, wherein the image placement information is composed of a placement direction information and placement order information (Oshima, Fig. 4, 18), but Oshima does not explicitly indicate whether the images are arranged vertically or horizontally and whether the images are arranged in an order of the viewpoints or in a reverse order of the viewpoints.

Matsuo teaches wherein whether the images are arranged vertically or horizontally and whether the images are arranged in an order of the viewpoints or in a reverse order of the viewpoints is indicated in the image placement and direction information (Matsuo, Fig. 10)

It would have been obvious at the time of the invention to modify the invention of Oshima with a direction setting table with values from 0 to 3 representing direction information in order to "merge the image data provided by the image rotating devices 703 and 704 based on the merge information taken out from the merge-related information setting table 708 (step S105)." (Matsuo, paragraph 58)

Regarding claim 5, while Oshima discloses the image data generating apparatus according to claim 1, Oshima does not explicitly teach wherein the image placement information is information on the placement mode of the images in which placements of the viewpoint images are positioned by rotation of a predetermined angle, information on the placement mode of the images in which positions of the images are inverted in a

predetermined direction based on a positional relationship of the viewpoints, or information on a combined mode of the two placement modes.

Matsuo teaches wherein the image placement information is information on the placement mode of the images in which placements of the viewpoint images are positioned by rotation of a predetermined angle, information on the placement mode of the images in which positions of the images are inverted in a predetermined direction based on a positional relationship of the viewpoints, or information on a combined mode of the two placement modes (Matsuo, paragraph 40, paragraph 55 and 56, Fig. 9 and 10).

It would have been obvious at the time of the invention to modify the invention of Oshima with a table of values representing positional information in which placements of the viewpoint images are positioned by rotation of a predetermined angle, information on the placement mode of the images in which positions of the images are inverted in a predetermined direction based on a positional relationship of the viewpoints, or information on a combined mode of the two placement modes because this allows "obtaining a single stereoscopic picture having parallax from two pictures." (Matsuo, paragraph 6)

Regarding claim 6, the combination of Oshima and Matsuo discloses the image data generating apparatus according to claim 5, wherein the predetermined angle is one or plural among 0 degrees, 90 degrees clockwise, 180 degrees clockwise and 270

degrees clockwise, and the predetermined direction is one or plural among a horizontal direction and a vertical direction (Matsuo, Fig. 9 and 10).

Regarding claim 8 and 9, while Oshima discloses the image data reproducing apparatus according to claim 7, Oshima does not disclose wherein the image placement information is information on the placement mode in which the viewpoint images are positioned by rotation of a predetermined angle, wherein the predetermined angle is one or plural among 0 degrees, 90 degrees clockwise, 180 degrees clockwise and 270 degrees clockwise.

Matsuo teaches wherein the image placement information is information on the placement mode in which the viewpoint images are positioned by rotation of a predetermined angle, wherein the predetermined angle is one or plural among 0 degrees, 90 degrees clockwise, 180 degrees clockwise and 270 degrees clockwise (Matsuo, paragraph 55; Fig. 9).

It would have been obvious at the time of the invention to modify the image display control apparatus of Oshima with the plurality of predefined angles taught by Matsuo in order to define "a rotating direction angle setting table" as described in paragraph 53 where the values 0 through 3 represent rotational information as described in paragraph 55. Paragraph 55 of the Matsuo reference goes on to say that as a result of having a rotating direction angle setting table 707, "the image rotating

devices 703 and 704 rotate the image data using a predetermined transformation matrix equation, based on parameters provided by the obtained rotation information."

Regarding claim 10, while Oshima discloses the image data reproducing apparatus according to claim 7, wherein the image placement information is composed of a placement direction information and placement order information (Oshima, Fig. 4, 18), but Oshima does not explicitly indicate whether the images are arranged vertically or horizontally and whether the images are arranged in an order of the viewpoints or in a reverse order of the viewpoints.

Matsuo teaches wherein whether the images are arranged vertically or horizontally and whether the images are arranged in an order of the viewpoints or in a reverse order of the viewpoints is indicated in the image placement and direction information (Matsuo, Fig. 10)

It would have been obvious at the time of the invention to modify the invention of Oshima with a direction setting table with values from 0 to 3 representing direction information in order to "merge the image data provided by the image rotating devices 703 and 704 based on the merge information taken out from the merge-related information setting table 708 (step S105)." (Matsuo, paragraph 58)

Regarding claim 11, while Oshima discloses the image data reproducing apparatus according to claim 7, Oshima does not explicitly teach wherein the image placement information is information on the placement mode of the images in which placements of the viewpoint images are positioned by rotation of a predetermined angle, information on the placement mode of the images in which positions of the images are inverted in a predetermined direction based on a positional relationship of the viewpoints, or information on a combined mode of the two placement modes.

Matsuo teaches wherein the image placement information is information on the placement mode of the images in which placements of the viewpoint images are positioned by rotation of a predetermined angle, information on the placement mode of the images in which positions of the images are inverted in a predetermined direction based on a positional relationship of the viewpoints, or information on a combined mode of the two placement modes (Matsuo, paragraph 40, paragraph 55 and 56, Fig. 9 and 10).

It would have been obvious at the time of the invention to modify the invention of Oshima with a table of values representing positional information in which placements of the viewpoint images are positioned by rotation of a predetermined angle, information on the placement mode of the images in which positions of the images are inverted in a predetermined direction based on a positional relationship of the viewpoints, or information on a combined mode of the two placement modes because this allows "obtaining a single stereoscopic picture having parallax from two pictures." (Matsuo, paragraph 6)

Regarding claim 12, Oshima and Matsuo discloses the image data reproducing apparatus according to claim 7, wherein the predetermined angle is one or plural among 0 degrees, 90 degrees clockwise, 180 degrees clockwise and 270 degrees clockwise, and the predetermined direction is one or plural among a horizontal direction and a vertical direction (Matsuo, Fig. 9 and 10).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elisa M. Rice whose telephone number is (571)270-1582. The examiner can normally be reached on 8:00a.m.-5:30p.m. EST Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on (571)272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elisa Rice ER 10/29/2007
Patent Examiner
2624

EMR

BRIAN WERNER
SUPERVISORY PATENT EXAMINER